

**AMENDMENTS TO THE CLAIMS:**

This listing of claims will replace all prior versions, and listings, of claims in the application. Please amend claims 1-24 as follows:

**LISTING OF CLAIMS:**

1. (Currently Amended) An apparatus for obtaining data on ~~the~~ a three-dimensional shape comprising:

Q 16 a producing device for producing data on the three-dimensional shape of an object and for producing data on two-dimensional shape of the object;

a display device for displaying ~~an image~~ images based on the data produced by the producing device;

a viewpoint variator for changing a viewpoint of ~~the~~ a three-dimensional image displayed on the display device; and

a position changer for changing ~~the~~ a relative positional relationship between the object and the producing device in accordance with ~~[[the]]~~ a viewpoint change of data on the three-dimensional shape by the viewpoint variator.

2. (Currently Amended) The apparatus according to claim 1, wherein the position changer changes the relative positional relationship between the object and the producing device in synchronism with the viewpoint change of the three-dimensional image by the viewpoint variator.

3. (Currently Amended) The apparatus according to claim 1, wherein the position changer changes the relative positional relationship between the object and the producing device after ~~the~~ confirmation of the viewpoint change of the three-dimensional image by the viewpoint variator.

Q<sup>16</sup> 4. (Currently Amended) The apparatus according to claim 1, wherein the position changer comprises a rotation stage for placing ~~an~~ the object thereon, the rotation stage being rotated in accordance with the viewpoint change of the three-dimensional image by the viewpoint variator.

5. (Currently Amended) The apparatus according to claim 1, wherein the position changer comprises a manipulator for shifting ~~the~~ a position of the producing device, the position of the producing device being shifted by the manipulator in accordance with the viewpoint change of the three-dimensional image by the viewpoint variator.

6. (Currently Amended) The apparatus according to claim 1, further comprising a composer for combining pieces of data on the three-dimensional shape of the object ~~inputted~~ input from the producing device from a plurality of directions so as to make up data on the three-dimensional shape on one coordinate system, wherein the display device displays the three-dimensional image based on the data on the three-dimensional shape combined by the composer.

7. (Currently Amended) An apparatus for obtaining data on ~~the~~ a three-dimensional shape, comprising:

a producing device for producing data on the three-dimensional shape of an object and for producing data on two-dimensional shape of the object;

a position changer for changing ~~the~~ a relative positional relationship between the object and the producing device;

a display device for displaying ~~an image~~ images based on the data produced by the producing device; and

a viewpoint variator for changing a viewpoint of ~~the~~ a three-dimensional image displayed on the display device in accordance with ~~the~~ a change of the relative positional relationship between the object and the producing device by the position changer.

8. (Currently Amended) The apparatus according to claim 7, wherein the viewpoint variator changes a ~~the~~ viewpoint of the three-dimensional image in synchronism with the change of the relative positional relationship between the object and the producing device by the position changer.

9. (Currently Amended) The apparatus according to claim 7, wherein the viewpoint variator changes a ~~the~~ viewpoint of the three-dimensional image after ~~the~~ confirmation of the change of the relative positional relationship between the object and the producing device by the position changer.

10. (Currently Amended) The apparatus according to claim 7, wherein the position changer comprises a rotation stage for placing ~~an~~ the object thereon.

11. (Currently Amended) The apparatus according to claim 7, wherein the position changer comprises a manipulator for shifting ~~the~~ a position of the producing device.

12. (Currently Amended) An apparatus for obtaining data on ~~the~~ a three-dimensional shape, comprising:

a producing device capable of changing ~~its~~ a relative positional relationship ~~with~~ between the producing device and an object, for producing data on the three-dimensional shape of the object and for producing data on two-dimensional shape of the object;

a display device for displaying ~~an image~~ images based on the data produced by the producing device; and

a viewpoint variator for changing a viewpoint of ~~the~~ a three-dimensional image displayed on the display device in accordance with ~~the~~ movement of the producing device relative to the object.

13. (Currently Amended) An apparatus for obtaining data on ~~the~~ a three-dimensional shape comprising:

a camera for outputting image data of an object;

a display device for displaying ~~an image~~ images of the object formed by data on the three-dimensional shape of the object and data on two-dimensional shape of the object based on the image data ~~outputted~~ output from the camera;

a viewpoint variator for changing a viewpoint of ~~the~~ a three-dimensional image displayed on the display device; and

a position changer for changing ~~the~~ a relative positional relationship between the object and the camera in accordance with ~~the~~ a viewpoint change of data on the three-dimensional shape by the viewpoint variator.

16. The apparatus according to claim 13, wherein the position changer changes the relative positional relationship between the object and the camera in synchronism with the viewpoint change of the three-dimensional image by the viewpoint variator.

15. (Currently Amended) The apparatus according to claim 13, wherein the position changer changes the relative positional relationship between the object and the camera after ~~the~~ confirmation of the viewpoint change of the three-dimensional image by the viewpoint variator.

16. (Currently Amended) The apparatus according to claim 13, wherein the position changer comprises a rotation stage for placing ~~an~~ the object thereon, the rotation

stage being rotated in accordance with the viewpoint change of the image by the viewpoint variator.

17. (Currently Amended) The apparatus according to claim 13, wherein the position changer comprises a manipulator for shifting ~~the~~ a position of the camera, the position of the camera being shifted by the manipulator in accordance with the viewpoint change of the three-dimensional image by the viewpoint variator.

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18. (Currently Amended) The apparatus according to claim 13, further comprising a composer for combining pieces of data on the three-dimensional shape of the object ~~inputted~~ input from the camera from a plurality of directions so as to make up data on the three-dimensional shape on one coordinate system, wherein the display device displays the three-dimensional image based on the data on the three-dimensional shape combined by the composer.

19. (Currently Amended) An apparatus for obtaining data on ~~the~~ a three-dimensional shape, comprising:

a camera for outputting image data of an object;

a position changer for changing ~~the~~ a relative positional relationship between the object and the camera;

a display device for displaying ~~an image~~ images of the object formed by data on the three-dimensional shape of the object and data on two-dimensional shape of the object based on the image data ~~outputted~~ output from the camera; and

a viewpoint variator for changing a viewpoint of ~~the~~ a three-dimensional image displayed on the display device in accordance with ~~the~~ a change of ~~the~~ a relative positional relationship between the object and the camera by the position changer.

Q 16 20. (Currently Amended) The apparatus according to claim 19, wherein the viewpoint variator changes ~~a~~ the viewpoint of the three-dimensional image in synchronism with the change of the relative positional relationship between the object and the camera by the position changer.

21. (Currently Amended) The apparatus according to claim 19, wherein the viewpoint variator changes ~~a~~ the viewpoint of the three-dimensional image after ~~the~~ confirmation of the change of the relative positional relationship between the object and the camera by the position changer.

22. (Currently Amended) The apparatus according to claim 19, wherein the position changer comprises a rotation stage for placing ~~an~~ the object thereon.

23. (Currently Amended) The apparatus according to claim 19, wherein the position changer comprises a manipulator for shifting ~~the~~ a position of the camera.

24. (Currently Amended) An apparatus for obtaining data on ~~the~~ a three-dimensional shape, comprising:

*a*<sup>16</sup> a camera capable of changing ~~its~~ a relative positional relationship ~~with~~ between the camera and an object, for outputting image data of ~~an~~ the object;

a display device for displaying ~~an image~~ images of the object formed by data on the three-dimensional shape of the object and data on two-dimensional shape of the object based on the image data ~~outputted~~ output from the camera; and

a viewpoint variator for changing a viewpoint of ~~the~~ a three-dimensional image displayed on the display device in accordance with ~~the~~ a movement of the camera relative to the object.

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